Data Item Description OT-005-06 (Continued):

DATA ITEM DESCRIPTION	FORM APPROVAL OMB NO 0704-0188

1. TITLE	2. IDENTIFICATION NUMBER
Site Safety and Health Plan	OT-005-06

3. DESCRIPTION / PURPOSE To provide requirements for (1) the contractor's Safety and Health Program and (2) the Site Safety and Health Plan for a specific Ordnance and Explosives (OE) project site.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
990205	CEHNC-ED-SY		

7. APPLICATION / INTERRELATIONSHIP This Data Item Description contains instructions for preparing Work Plan chapters addressing site safety and health for OE projects.

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER

10. PREPARATION INSTRUCTIONS

10.1 Safety and Health Program. The contractor shall be responsible for initiating and maintaining a safety and health program that complies with the requirements of the Occupational Safety and Health Administration (OSHA) and the U.S. Army Corps of Engineers (USACE). The Safety and Health Program shall include, as a minimum, the requirements listed below:

10.2 Site-specific Safety and Health Plan (SSHP). The contractor shall develop a Site-Specific Safety and Health Plan in accordance with the requirements of 29 CFR 1910/29 CFR 1926, ER 385-1-92, EM 385-1-1 and any other applicable Federal, State and Local safety and health requirements. The level of detail provided shall be tailored to the type of work, complexity of operations to be accomplished, and the hazards anticipated. The SSHP shall address all elements required by 29 CFR 1910.120(b)(4)(ii), 29 CFR 1926.65(b)(4)(ii), and ER 385-1-92, Appendix B. Where a specific element is not applicable, list the element in the plan, state that the element is not applicable with a brief justification for its omission. The SSHP may serve as the Accident Prevention Plan provided it addresses all content requirements of 29 CFR 1910.120 and EM 385-1-1, Table 1. Daily safety and health inspections shall be conducted to determine if site operations are conducted IAW the accepted plans and contract requirements.

10.2.1 General. The SSHP shall be developed, implemented, and overseen by a board-certified or board-eligible Industrial Hygienist (IH) with at least 2 years hazardous waste site experience. Board certification or eligibility shall be documented by submission of a copy of the certificate or letter of acceptance to sit for the exam by the American Board of Industrial Hygiene (ABIH) to the Contracting Officer. A fully trained and experienced site safety and health officer (SSHO) (meeting the qualifications of a UXO Supervisor at minimum), responsible to the prime contractor, shall be delegated to implement the on-site elements of the SSHP. The SSHP shall be in a form usable by authorized U.S. Government representatives and other authorized visitors to the site during site operations.

10.2.2 Staff Organization, Qualifications, and Responsibilities. The operational and safety responsibilities of each key person shall be identified. The organizational structure, with lines of authority and overall responsibilities for the safety and health of the contractor employees and all subcontractors, shall be discussed. An organizational chart showing the lines of authority for safety shall be provided. Each person assigned specific safety and health responsibilities shall be identified and his/her qualifications and experience documented by a resume in the SSHP.

10.2.3 Site Description and Contamination Characterization. Provide a description of the site based on results of previous studies, site history, and prior uses and activities. Compile a summary of hazardous substances and safety and health hazards likely to be encountered onsite. Include ordnance and chemical/biological, concentration ranges, media in which found, locations onsite, and estimated quantities/volumes to be impacted by this work. The site descriptions shall be based on results of previous studies and the history of prior uses and activities conducted under Task 1 of the Scope of Work.

11. DISTRIBUTION STATEMENT

Data Item Description OT-005-06 (Continued):

10.2.4 Hazard Analysis and Risk Assessment. In the SSHP, the contractor shall provide a complete description of the work to be performed at each site. The contractor shall identify the chemical, physical, safety and biological hazards that are expected to be encountered for each task and/or site operation to be performed. Each task/operation is to be discussed separately. Routes and sources of exposure for chemical hazards anticipated onsite, along with chemical/biological names, concentration ranges, media in which found, locations onsite, estimated quantities/volumes, and the applicable regulatory standards (PELs) and recommended exposure limits (TLVs), shall be provided. Action levels shall be specified and justified for implementation of engineering controls and/or work practice controls, initial levels or changes in level of personal protective equipment, for emergency evacuation of onsite personnel, and for the prevention and/or minimization of public exposure to hazards created by onsite activities.

10.2.5 Training. All general site workers shall receive 40 hours of initial off-site safety and health training (24 hours for workers occasionally onsite and whose tasks are limited and are unlikely to be overexposed) which is relevant to hazardous waste site activities, plus three days of supervised field experience (one day for workers occasionally onsite), in compliance with 29 CFR 1910.120(e). In addition, site-specific, supervisory, refresher and visitor training IAW the aforementioned regulations shall be addressed. The content, duration, and frequency of all training shall be described.

10.2.6 Personal Protective Equipment. A Personal Protective Equipment (PPE) Program shall be included in the SSHP. The contractor shall describe in detail and provide appropriate PPE to ensure workers, official visitors and government employees are not exposed to levels greater than the action level for identified hazards for each operation and work zone. The program shall address all the elements of 29 CFR 1910.120(g)(5), 29 CFR 1910.134, and 29 CFR 1910.132. Minimum levels of protection necessary for each task/operation to be performed at each site based on probable site conditions, potential occupational exposure, and the hazard analysis/risk assessment required above. Include specific types and materials for protective clothing and respiratory protection. Establish and justify upgrade/downgrade criteria based upon the action levels established as required by paragraph 10.2.6 (as a minimum) and as appropriate. The following emergency and first aid equipment shall be immediately available of onsite use: (1) First aid equipment and supplies approved by the consulting physician; (2) Emergency eye-washes/showers which comply with ANSI Z-358.1; (3) Emergency use respirators (worst case appropriate and as identified by the hazards analysis); (4) Spill control materials and equipment as appropriate; and (5) Fire extinguishers (specify type, size and locations).

10.2.7 Medical Surveillance. All personnel performing onsite activities shall participate in an ongoing medical surveillance program meeting with the requirements of 29 CFR 1910.120. If chemical agent is a suspect site contaminant the requirements in DA PAM 40-8 and/or 40-173 shall apply. The medical examination protocols and results shall be overseen by a licensed physician who is certified in Occupational Medicine by the American Board of Preventive Medicine, or who by necessary training and experience is board eligible. Minimum specific exam content and frequency based on probable site conditions, potential occupational exposures, and required protective equipment shall be specified. A written medical opinion from the examining physician as to fitness to perform the required work shall be made available to the Contracting Officer upon request for any site employee.

10.2.8 Environmental and Personal Monitoring. Where it has been determined that there may be employee exposures to and/or off site migration potential of hazardous airborne concentrations of hazardous substances, appropriate direct reading (real-time) air monitoring and integrated (time weighted average) air sampling shall be conducted IAW applicable federal, state, and local requirements. Air monitoring/sampling must accurately represent concentrations of air contaminants encountered onsite and leaving the site. The types and frequency of air monitoring/sampling to be performed shall be specified for onsite and perimeter locations, where applicable. Where perimeter monitoring is not deemed necessary, provide suitable justification for its exclusion. When applicable, NIOSH and/or EPA sampling and analytical methods shall be used. Personal samples, where necessary, shall be analyzed by laboratories successfully participating in and meeting the requirements of the American Industrial Hygiene Association's (AIHA) Proficiency Analytical Testing (PAT) or Laboratory Accreditation Program. Include, as appropriate, real time (direct-reading) monitoring and integrated Time Weighted Average (TWA) sampling for specific contaminants of concern, Meteorological, noise and radiation monitoring shall be conducted as needed depending upon the site hazard assessment. All monitoring and sampling protocol shall be specified to include instrumentation to be used and calibration of instruments. All monitoring results shall be compared to action levels to determine the need for corrective actions.

10.2.9 Site Control. The contractor shall describe size control measures which include site maps, the work zone delineation and access points, the on/off site communication system, general site access controls, an security procedures (physical and procedural).

10.2.10 Personnel and Equipment Decontamination. The contractor shall develop and specify decontamination procedures with 29 CFR 1910.120 for personnel, personal protective equipment, monitoring instruments, sampling equipment, and other equipment used onsite. Decontamination procedures shall address specific measures to ensure that contamination is confined to the

work site. Necessary facilities and their locations, detailed standard operating procedures, frequencies, supplies, and materials to accomplish decontamination of site personnel and to determine adequacy of equipment decontamination shall be discussed.

10.2.11 Emergency Response and Contingency Procedures (Onsite and Off-site). An Emergency Response Plan, as required by 29 CFR 1910.120 shall be developed and implemented. As a minimum, it shall address the following elements: (1) Pre-emergency planning and procedures for reporting incidents to appropriate government agencies for potential chemical exposure, personal injuries, fire/explosions, environmental spills and releases, discovery of radioactive materials; (2) Personnel roles, lines of authority, communications; (3) Posted instructions and list of emergency contacts: physician, notified nearby medical facility, fire and police departments, ambulance service, state/local/federal agencies, CIH, and Contracting Officer; (4) Emergency recognition and prevention; (5) Site topography, layout and prevailing weather conditions; (6) Criteria and procedures for site evacuation, emergency alerting procedures/employee alarm system, emergency PPE and equipment, safe distance, place of refuge, evacuation routes, site security and control; (7) Specific procedures for decontamination and medical treatment of injured personnel; (8) Route maps to nearest pre-notified medical facility; (9) Criteria for initiating community alert program, contacts and follow-up. Material Safety Data Sheets (MSDS) for each hazardous substance anticipated to be encountered on site shall be made accessible to site personnel at all times and shall be submitted in an appendix to the SSHP.

10.2.12 Confined Space Entry. The contractor shall develop procedures for confined space entry in IAW 29 CFR 1910.146. If no confined spaces exist onsite and there is no planned excavations which could result in a confined space, this section may be omitted.

10.2.13 Spill Containment. Where major spills may occur, a spill containment program shall be implemented to contain and isolate the entire volume of the hazardous substance being transferred or stored. The program will be designed IAW 29 CFR 1910.120(j) and will be required for hazardous substances on the site as well as hazardous materials brought on to the site for use during the work process.

10.2.14 Heat/Cold Stress Monitoring. Heat and cold stress monitoring protocols, as appropriate, shall be described in detail. Work/rest schedules shall be determined based upon ambient temperature, humidity, wind speed (wind chill), solar radiation intensity, duration and intensity of work, and protective equipment ensembles. Minimum required physiological monitoring protocols which will affect work schedules shall be developed. In cases where impervious clothing is worn, the NIOSH/OSHA/USCG/EPA "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" protocol for prevention of heat stress shall be followed and heat stress monitoring shall commence at temperatures of 70 degrees Fahrenheit and above. Where impervious clothing is not worn, the American Conference of Governmental Industrial Hygienists (ACGIH) heat stress standard (TLV) shall be used. For cold stress monitoring to help prevent frostbite and hypothermia, the ACGIH cold stress standard shall be referenced and followed, as a minimum.

10.2.15 Standing Operating Procedures, Engineering Controls, and Work Practices. The contractor shall develop Standing Operating Procedures (SOPs) to protect field personnel, prevent accidents, minimize hazards, and to take action to correct hazards where necessary. Site rules and prohibitions for safe work practices shall be discussed and shall include such topics as use of the buddy system, smoking restrictions, material handling procedures, confined space entry, excavation safety, physiological and meteorological monitoring for heat/cold stress, illumination, sanitation, daily safety inspections, etc. This list of topics is not intended to be all-inclusive.

10.2.16 Logs, Reports and Record Keeping. Record keeping procedures for training logs, daily safety inspection logs, employee/visitor registers, medical surveillance records and certifications, air monitoring results, and personal exposure records shall be specified. All personal exposure and medical monitoring records shall be maintained IAW applicable OSHA standards, CFR 1904, 1910, and 1926. The contractor shall develop, retain, and submit, as part of the final report, all visitor registration logs, training logs, and daily safety inspection logs (as part of the daily QC Reports). The contractor shall maintain copies of the required training and medical certificates onsite and shall make them available for government inspection upon request. All recordable accidents/injuries/illnesses shall be telephonically reported to the Contracting Officer immediately. A completed ENG Form 3394, Accident Investigation Report, shall be submitted within 30 calendar days in accordance with AR 385-40 and USACE Supplement 1 to that regulation.

10.2.17 Radiological and Chemical Warfare Material (CWM). CWM sites have requirements above the SSHP requirements on an HTRW site. Guidance for these requirements are found in ER 385-1-92, Appendix C and other applicable Army regulations. When response activities are required on CWM sites, the contractor shall coordinate with the Contracting Officer and the Commander, Chemical and Biological Defense Command (CBDCOM) to determine the assistance to be provided by the Army Technical Escort Unit (TEU) and/or Edgewood Research, Development and Engineering Center (ERDEC).